

## **Statement of Reasons in Support of Pre-Appeal Brief Review**

### The Claimed Invention

The present invention is directed to closure liners molded from a composition that includes, in addition to the matrix polymer, an organopolysiloxane, a saturated amide and an oxidized polyethylene. The composition must be essentially free of erucamide or other unsaturated amide. None of the cited references teach or suggest the specific combination of an organopolysiloxane, a saturated amide and an oxidized polyethylene. However, it is this specific combination that provides a liner with reduced off-odor/flavor while maintaining a sufficiently low removal torque.

As shown in Table 1 (Example 1), no one component alone provides acceptable removal torque – see D (stearamide alone), E (oxidized polyethylene alone), and F (polysiloxane alone) compared to B (erucamide alone). As shown in Table 3, the composition 3A, which includes the claimed combination of agents, exhibits excellent removal torque as good or better than erucamide (3B), without the off-odor/flavor characteristics of erucamide (or other unsaturated amides).

### The Rejection

Claims 22-28 and 33 stand rejected under 35 U.S.C. §102(b) as anticipated by Knight (EP 0129309), as evidenced by Burdock (Oxidized Polyethylene Wax). Claim 29 stands rejected under 35 U.S.C. §103 as unpatentable over Knight, as evidenced by Burdock, in view of White (US 5,955,163). Claims 30-32 and 34 stand rejected under 35 U.S.C. §103 as unpatentable over Knight, as evidenced by Burdock, in view of Akao (EP 0569950).

### Errors in the Asserted Rejections

Knight does not teach a composition that is free of unsaturated amide and that includes an oxidized polyethylene in combination with an organopolysiloxane and a saturated amide.

With respect to the anticipation rejection (the only rejection applied against claims 22-28 and 33), the Examiner has attempted to select specific elements within the disclosure of Knight and to combine those elements in a particular way to arrive at the claimed invention. However, since even the combined elements do not anticipate the claimed invention, the Examiner has suggested that the missing element is present by asserting an inherency argument. The problem is that this inherency position is contradicted by the art.

Applicant has reproduced in the table below a side-by-side comparison of the claimed composition and the composition exemplified in the last paragraph of Knight Example 2, which is the Knight composition closest to the claimed composition.

<u>Claimed Composition</u>	<u>Knight Ex. 2 Composition</u>
Thermoplastic polymer (e.g., EVA)	Ethylene vinyl acetate copolymer
Organopolysiloxane	Polysiloxane
Saturated amide (e.g., behenamide)	Oleamide
Oxidized polyethylene	Polyethylene wax + polyethylene (both are polyethylene – wax has lower mol. wt.)
(antioxidant used in exemplified comps)	Thermal stabilizer (aka antioxidant)
Free of unsaturated amide	(oleamide is unsaturated amide)

As can be seen, the Knight composition differs from the claimed composition in three important respects. First, it does not include a saturated amide as required by the claims. Second, it is not free of unsaturated amide as required by the claims, but includes an unsaturated amide (oleamide). Third, it does not include oxidized polyethylene as required by the claims, but rather includes two forms of polyethylene (lower and higher MW). Thus, it should be clear that this example does not anticipate the claimed composition, nor do any other examples in Knight.

While Knight generally teaches that stearamide, a saturated amide, may be employed as a fatty amide, Knight does not disclose the specific combination of stearamide with silicone and oxidized polyethylene, as claimed. Thus, although

Knight includes a saturated amide in a list of potential materials that may be employed, this general disclosure is not an anticipatory express disclosure of the specific combination as claimed. To anticipate, one must have identity in disclosure, not just a possibility based on suggestion. Moreover, since Knight has only exemplified an unsaturated amide (oleamide) in the examples, these examples, clearly do not anticipate the claimed invention. In fact, the use of oleamide (an unsaturated amide) in the examples teaches away from the present invention, which specifies that the composition must be essentially free of unsaturated amide.

With respect to the inherency position, the Examiner is clearly incorrect in hypothesizing that the polyethylene wax included in the Knight compositions would oxidize to produce the oxidized polyethylene required by the claimed composition. First, it is well-known that commercially available polyethylenes typically include thermal stabilizers or antioxidants. See, for example, Kirk-Othmer Encyclopedia of Chemical Technology, "Antioxidants, Polymers," Vol. 3, p. 102 (2002), of record, particularly section 8.1 on page 118 ("Low concentrations of stabilizers (<0.1%) are often added to polyethylene ...."). While the Examiner has cited Winslow, a 1958 article, for its recognition that polyethylene oxidizes, the Examiner has ignored Winslow's teaching that antioxidant compounds may be added to polyethylene to counteract the oxidation (see p. 319, col. 2, lines 5-7; p. 320, last paragraph). Thus, Winslow essentially confirms what has become the present day common usage of antioxidants in polyethylene resin.

Second, and more importantly, all of the Knight examples include a thermal stabilizer as an additive. This stabilizer is included to prevent oxidation of the components included in the Knight compositions. Thus, the polyethylene wax would not form oxidized polyethylene, as the Examiner suggested, because the thermal stabilizer present in the composition would inhibit oxidation. The Examiner's oxidation hypothesis is simply contrary to the available evidence and cannot support a theory of anticipation absent a clear and unambiguous teaching in the art.

The Federal Circuit has provided clear guidelines for establishing inherency in *In re Robertson*, 49 USPQ.2d 1949, 1950-51 (Fed. Cir. 1999):

To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Id.* at 1269, 20 USPQ2d at 1749 (quoting *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (C.C.P.A. 1981). [Emphasis added.]

Clearly, the Examiner has not established, beyond mere possibility or conjecture, that the Knight compositions necessarily include oxidized polyethylene and that this would be recognized by persons of ordinary skill. Accordingly, Knight does not anticipate the claimed invention because Knight does not disclose a composition that includes oxidized polyethylene and because Knight does not disclose a composition that includes a saturated amide, free of unsaturated amide, in combination with a silicone and oxidized polyethylene.

While the Examiner has suggested that Knight does not indicate that the stabilizer is an essential part of the Knight composition, this statement is presumably designed to support a further theory that one might remove the stabilizer from the exemplified compositions and thereby convert the polyethylene to oxidized polyethylene. While this further explanation, at best, might be formulated into a §103 rejection, it begs the question why a skilled worker would be motivated to leave out a material that prevents oxidation of the components in the composition.

It is noted that the Examiner has not rejected claims 22-28 and 33 under 35 U.S.C. §103 as obvious over Knight. In any event, applicant respectfully urges that such a rejection would be improper. As discussed above, Knight does not disclose the use of oxidized polyethylene in the Knight compositions. Rather, Knight uses a polyethylene wax. Knight does not suggest that the polyethylene wax component can

or should be replaced with oxidized polyethylene. In addition, Knight's suggestion, and apparent preference, for using an unsaturated amide (oleamide) is a clear teaching away from the present invention, which requires that the composition be free of unsaturated amide. Finally, there is no suggestion in Knight to use the three specific components – saturated amide, silicone, and oxidized polyethylene – in combination, as claimed.

While the Examiner has rejected claims 29, 30-32 and 34 under 35 U.S.C. §103, these rejections are primarily based on Knight, as applied to claim 22. As discussed above, Knight does not render claim 22 obvious, primarily because Knight does not disclose or suggest the use of oxidized polyethylene (and, as pointed out earlier, the Examiner's oxidation hypothesis is erroneous given the presence of stabilizer in the Knight compositions). The secondary reference White was cited against claim 29 purportedly for its teaching of styrene-ethylene butylene-styrene copolymer (SEBS) in bottle crown gaskets. The secondary reference Akao was cited against claims 30-32 and 34 purportedly for its teaching that behenic acid amide and stearic acid amide are equivalent (at least as lubricants used in resin films for packaging photographic photosensitive articles). Clearly, neither of the secondary references make up for the deficiency of Knight.

In view of the above arguments and the evidence of record, applicants believe that the Examiner's rejections should be withdrawn.

Respectfully submitted,

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